

# ***Institutional Controls Status Report for Waste Area Groups 6 and 10***

*April 2003*



*Idaho National Engineering and Environmental Laboratory  
Bechtel BWXT Idaho, LLC*

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**April 2003**

**Idaho National Engineering and Environmental Laboratory  
Environmental Restoration Program  
Idaho Falls, Idaho 83415**

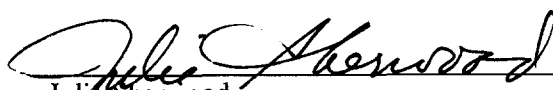
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# Institutional Controls Status Report for Waste Area Groups 6 and 10

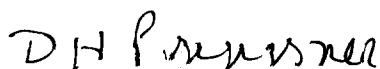
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## ABSTRACT

This report documents the current status of institutional control (IC) measures at 16 Waste Area Group 6 and 10 sites. These institutionally controlled sites include three ordnance areas, five trinitrotoluene/royal demolition explosive sites, seven limited action sites, and the Security Training Facility Gun Range. Required ICs are identified in the *Record of Decision for the Experimental Breeder Reactor-I/Boiling Water Reactor Experiment Area and Miscellaneous Sites* (DOE-ID 2002).



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## ACRONYMS

ANL-W	Argonne National Laboratory-West
ANP	Aircraft Nuclear Propulsion
BORAX	Boiling Water Reactor Experiment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFLUP	Comprehensive Facility and Land Use Plan
D&D&D	deactivation, decontamination, and decommissioning
DOE	Department of Energy
EBR-I	Experimental Breeder Reactor-I
EOCR	Experimental Organic Cooled Reactor
HTRE	Heat Transfer Reactor Experiment
IC	institutional control
ICPP	Idaho Chemical Processing Plant
INEL	Idaho National Engineering Laboratory
INEEL	Idaho National Engineering and Environmental Laboratory
LCCDA	Liquid Corrosive Chemical Disposal Area
MCP	management control procedure
NODA	Naval Ordnance Disposal Area
NPG	Naval Proving Grounds
NRTS	Naval Reactor Testing Station
NTCRA	non-time critical removal action
OMRE	Organic-Moderated Reactor Experiment
OU	operable unit
RDX	royal demolition explosives
ROD	Record of Decision
SRPA	Snake River Plain aquifer



STF	Security Training Facility
TNT	trinitrotoluene
UST	underground storage tank
UXO	unexploded ordnance
WMO	Waste Management Operations
WAG	waste area group

# **Institutional Controls Status Report for Waste Area Groups 6 and 10**

## **1. INTRODUCTION**

This report documents the status of institutional controls (ICs) currently required to ensure the protection of human health and the environment at 16 Waste Area Group (WAG) 6 and 10 sites at the Idaho National Engineering and Environmental Laboratory (INEEL). Required ICs are identified in the *Record of Decision (ROD) for Experimental Breeder Reactor-I/Boiling Water Reactor Experiment Area and Miscellaneous Sites* (DOE-ID 2002) as part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC 9601 et seq.). Seven limited action sites require ICs at WAG 6/10, and pre-remedial ICs are required at an additional nine sites. The need for continued ICs at the nine sites will be determined after remediation of the individual sites. A comprehensive INEEL IC plan will be developed as part of the operations and maintenance plan in the Operable Unit 10-04 remedial design/remedial action work plan due out by October 2003. The ICs are generally defined as administrative and legal controls intended to minimize potential human exposure to contamination or other hazards by limiting land or resource use. For the purposes of this report, engineered controls, such as signs and fences, are included as ICs.

## **2. INEEL HISTORY**

Between 1942 and 1949, the U.S. Navy established and operated a proving range to test fire battleship guns. As illustrated in Figure 1, the Naval Proving Grounds (NPG) occupied approximately 702 km<sup>2</sup> (271 mi<sup>2</sup>) within current INEEL boundaries. During the lifetime of the NPG, approximately 1,650 minor (3- to 5-in.) and major (16-in.) guns were tested. In addition, experimental tests were conducted using explosives and live ordnance, primarily in mass detonations. During these large-scale mass detonation tests, hundreds of thousands of pounds of explosives in land mines, smokeless powder, and bombs were placed in explosives storage bunkers or open areas and detonated to determine the effects on collocated bunkers and facilities. Stacks of ammunition were also shot with explosive projectiles to test their susceptibility to enemy fire. As a result of the activities at the NPG, debris, such as projectiles (explosive and inert), explosive material (trinitrotoluene/royal demolition explosives [TNT/RDX]), unexploded ordnance (UXO), and NPG structures remain. After the end of World War II, explosive tests at the NPG were discontinued.

The INEEL, established in 1949 as the National Reactor Testing Station (NRTS), is a reservation devoted to energy research and environment-related activities and is managed by the U.S. Department of Energy (DOE). The NRTS was renamed the Idaho National Engineering Laboratory (INEL) in 1974 to reflect the engineering activities being conducted. In 1997, the INEL was changed to the INEEL to indicate an emphasis on environmental research.

Facilities at the INEEL have historically been dedicated to developing and testing peaceful applications of nuclear power. During the 50 years of INEEL operations, disposal practices have been implemented in compliance with state and federal regulations and with policies established by DOE and its predecessors. However, some of these past practices are no longer acceptable by current standards and have been discontinued. Contaminated soil, water, and structures are the consequence of some historical disposal practices. In addition, occasional accidental releases have contributed to the contaminated media.

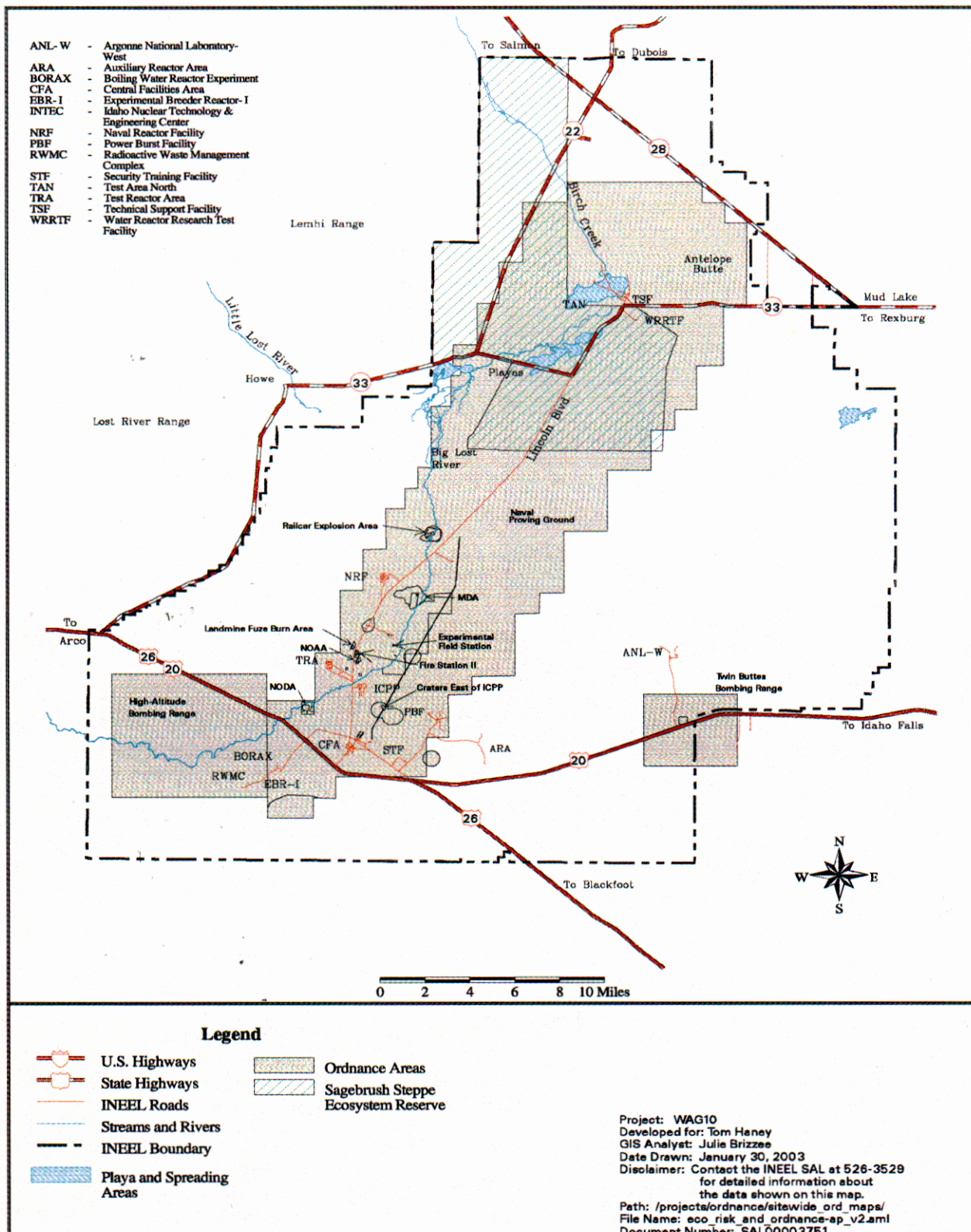


Figure 1. Location of WAG 10 ordnance areas at the INEEL.

### **3. WAG 6 HISTORY**

The Experimental Breeder Reactor-I (EBR-I) and the Boiling Water Reactor Experiment (BORAX) areas are located close together, have similar operational backgrounds, and have similar sources of contamination. Therefore, EBR-I and BORAX areas were consolidated into one WAG for comprehensive evaluation (DOE-ID 1991). Other than limited action consisting of ICs such as fences and warning signs, all remedial actions have been completed at WAG 6 sites. A synopsis of the history for each facility is provided in the following sections.

#### **3.1 EBR-I Area**

The EBR-I complex is in the southwest portion of the INEEL, approximately 3.2 km (2 mi) from U.S. Highway 20. The idea for a breeder reactor (i.e., a reactor that could produce more fuel than it uses) initiated with scientists working on the nation's wartime atomic energy program in the 1940s when uranium was in short supply and the large bodies of uranium ore found in the 1950s were yet unknown. It was decided the first power reactor would attempt to prove the theory of fuel breeding. In 1953, EBR-I scientists proved that a reactor could create more fuel than it used even while it created electricity. The first electricity ever generated from nuclear power occurred at EBR-I on December 20, 1951. Scientists continued to conduct reactor experiments at EBR-I until 1963.

Following its dedication by President Lyndon Johnson as a Registered National Historic Landmark on August 25, 1966, EBR-I was also dedicated as a National Historic Mechanical Engineering Landmark in 1979 by the American Society of Mechanical Engineers; as a Historic Landmark for Advances in Materials Technology in 1979 by the American Society of Metals; and as a Nuclear Historic Landmark by the American Nuclear Society in 1987. The two Aircraft Nuclear Propulsion (ANP) engines are also part of the National Historic Landmark. The EBR-I reactor building and the ANP assemblies will be maintained and operated as a National Historic Landmark into the foreseeable future.

CERCLA sites related to EBR-I were underground storage tanks (USTs), septic systems, and radionuclide-contaminated soil. Except for the active septic system that supports the EBR-I National Historic Landmark, most of the USTs and inactive septic systems have been removed from the EBR-I area. The radionuclide-contaminated soil outside the EBR-I building was remediated in a 1995 removal action. As discussed in the ROD, the only site in the EBR-I area remaining under IC is the EBR-I Fuel Oil Tank site (WMO-703). Figure 2 provides an illustration of the EBR-I area. Of the buildings once located at the EBR-I complex, only a small guardhouse, the original reactor building (EBR-601), and its office additions remain. In addition, two nuclear jet engines, Heat Transfer Reactor Experiment (HTRE) assemblies HTRE-2 and HTRE-3, are on display outside the EBR-I perimeter fence.

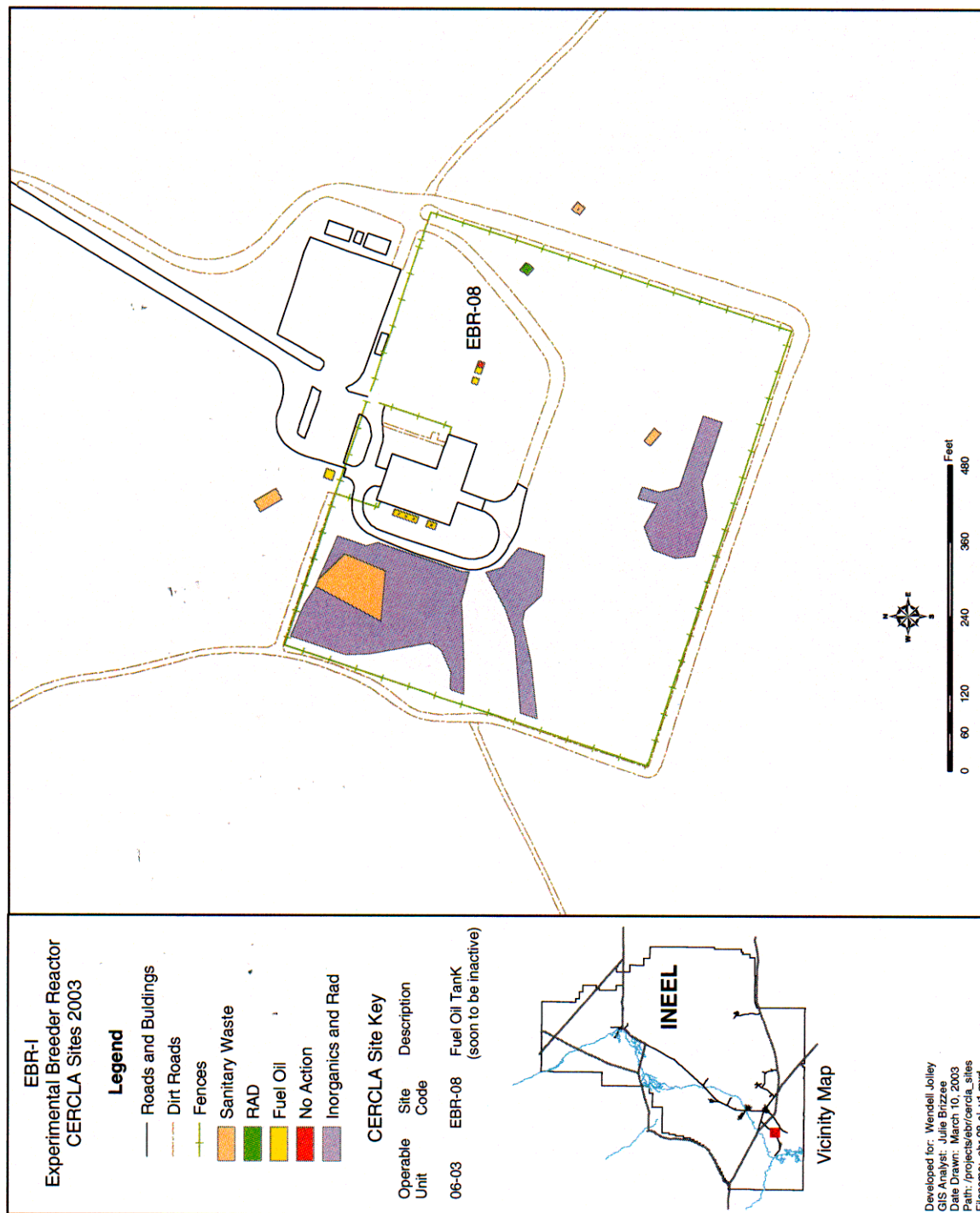


Figure 2. Location of CERCLA sites at EBR-I.

## 3.2 BORAX Area

The BORAX area, located approximately 1.21 km (0.75 mi) north of EBR-I, was the site of five (BORAX-I through -V) reactor experiments conducted between 1953 and 1964. The experiments began with BORAX-I, which was used to demonstrate the feasibility of boiling water reactors. Before this experiment, it had generally been thought that steam formation in a core would result in nuclear instabilities, but the BORAX series conclusively proved that steam actually helped stabilize nuclear reactions. The BORAX-I reactor was intentionally destroyed in 1954 to determine its inherent safety under extreme conditions and afterward was buried in place.

In late 1954, another BORAX facility was constructed a few hundred feet northeast of BORAX-I. Over the next 10 years, three reactors, BORAX-II, -III, and -IV, shared the same reactor vessel but used different fuel designs and core configurations. The BORAX-V reactor used the same facility but used a new reactor vessel and core system. On July 17, 1955, the BORAX-III reactor gained historical significance as the first nuclear reactor in the world to supply electricity to a community (i.e., Arco, Idaho).

CERCLA sites related to BORAX include USTs, septic systems, a leach pond, a ditch, a trash dump, and two former reactor sites as shown in Figure 3. Other than fences, none of the aboveground structures related to BORAX remain. All of the USTs and septic systems have been removed. The BORAX leach pond was filled with clean dirt in 1985. The radionuclide-contaminated soil in the BORAX ditch was remediated in a 1995 removal action. All waste material was removed from the BORAX trash dump in 1985. Argonne National Laboratory-West (ANL-W) personnel dispositioned the BORAX-I, II, -III, and -IV reactor fuels and vessel components at the completion of each respective experiment. At the completion of the BORAX-V experiment, all reactor fuel and portions of the internal reactor were removed by ANL-W personnel for dispositioning. Later, several phases of deactivation, decontamination, and decommissioning (D&D&D) removed the BORAX-V aboveground facility structures, stabilized the remaining underground structures, filled the basement with soil, and replaced concrete foundation blocks over the basement. The radionuclide-contaminated soil related to the BORAX-I reactor was remediated in 1997 under the Operable Unit (OU) 5-05/6-01 ROD (INEEL 1996). An engineered barrier cap was placed over the former reactor site. The BORAX-08 and -09 sites, the BORAX ditch, and the BORAX-V reactor building were added to WAG 6 after the signing of the Federal Facility Agreement and Consent Order. A non-time critical removal action (NTCRA) was conducted at the BORAX-08 ditch between August 28 and September 18, 1995. A D&D&D removal and containment action was conducted at BORAX-09 beginning in April 1996 and concluding in May 1997. As discussed in the ROD, the only sites in the BORAX area remaining under IC are the BORAX-II through -V Leach Pond, the BORAX-I Burial Site, the BORAX ditch, and the BORAX-II through -V facilities.

## 4. WAG 10 HISTORY

WAG 10 includes miscellaneous INEEL sites and portions of the Snake River Plain aquifer (SRPA) outside other WAGs. As discussed previously, the assessment of the SRPA and any new sites identified after the development of OU 10-04 will be prepared under OU 10-08. The WAG 10 sites assessed under OU 10-04 include the Liquid Corrosive Chemical Disposal Area (LCCDA); the Organic-Moderated Reactor Experiment (OMRE) leach pond; the sites related to the Experimental Organic Cooled Reactor (EOCR), later called the Security Training Facility (STF); the STF sumps, pits, and gun range; and numerous ordnance areas. In addition, the Idaho Chemical Processing Plant (ICPP) Fly Ash Pit (CPP-66) was added to OU 10-04 for an ecological risk assessment. Sites in the WAG 10 area remaining under IC are the NPG, the Twin Buttes Bombing Range, the Arco High Altitude Bombing Range, the Experimental Field Station, the Land Mine Fuze Burn Area, the National Oceanic and Atmospheric Administration site, the Naval Ordnance Disposal Area, the STF Gun Range, the Juniper Mine, the OMRE Leach Pond, and the Fire Station II Zone Range Fire Burn Area.

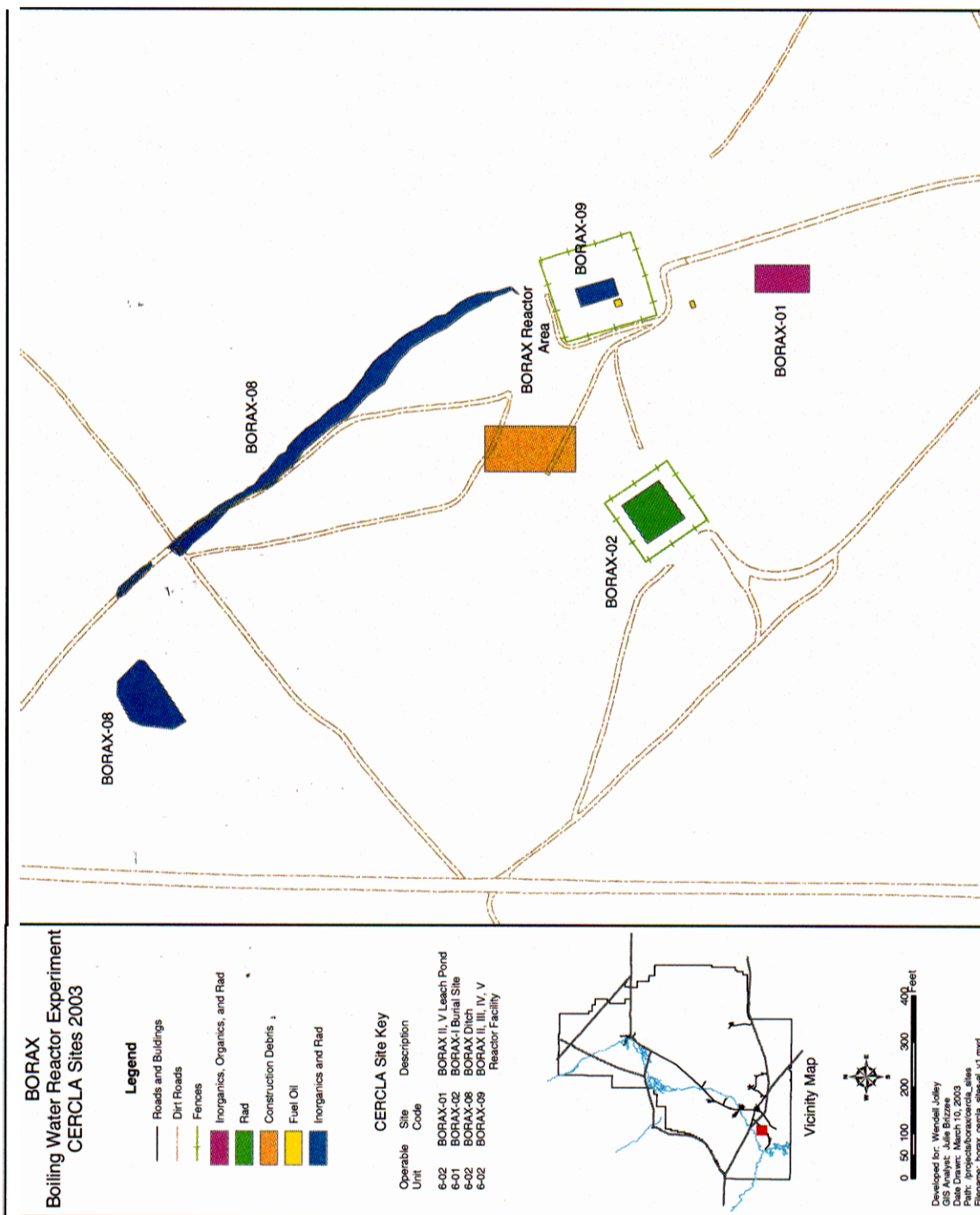


Figure 3. Location of CERCLA sites at BORAX.



OMRE was a nuclear reactor that operated from 1957 to 1963, approximately 3.25 km (2 mi) southeast of the Central Facilities Area. The OMRE leach pond was used for OMRE reactor wastewater disposal. The most contaminated portion of the pond soil was excavated in 1979 and sent to the Radioactive Waste Management Complex. The pond has since been backfilled, and the entire area was revegetated with grass, but low levels of radionuclide-contaminated soil are still present.

Construction of the EOCR was nearing completion when the program was cancelled. The EOCR was never an operating nuclear reactor, and the sites related to the EOCR never received waste associated with the EOCR program. Some of the EOCR sites were removed during the D&D&D of the EOCR facility in 1999. All that remains are empty and unused ponds and a septic tank. The only site in the EOCR area that remains with ICs is the STF Gun Range. The STF Gun Range was used from 1983 to 1990 by INEEL security for target practice. During that time, several million rounds of small-arms bullets were fired into targets set on the gun range berm.

Most ordnance, UXO, and UXO-related areas at the INEEL result from activities conducted at the NPG in the 1940s. Between 1942 and 1950, the United States military tested guns by firing at down-range targets. Most of the projectiles were nonexplosive; however, experimental and test work was also performed using explosives and live ordnance, primarily in mass detonations. At some locations like the Naval Ordnance Disposal Area, where these materials remain from explosive testing activities, UXO is visibly obvious and has undergone some limited remediation.

## 5. INSTITUTIONAL CONTROLS

ICs are required when current residual contamination precludes unrestricted land use for CERCLA sites at the INEEL. In accordance with the *INEEL Comprehensive Facility and Land Use Plan* (DOE-ID 1997), ICs will remain in place until at least 2095, unless results from a five-year or periodic review conclude that unrestricted use is allowable. After 2095, DOE may no longer manage INEEL activities, and controls may take the form of land-use restrictions. However, it is anticipated that industrial use will continue at the INEEL for the IC period and beyond.

Table 1 shows the IC requirements identified in the OU 10-04 ROD and provides the current status of each site. Photos, administrative controls, work controls, and additional site information are presented in Appendix A. The management control procedures and work control procedures (MCPs) identified in Appendix A are listed below with a brief description of each procedure.

- MCP-3002, “Managing Disturbed Soils”: This procedure addresses management of contaminated INEEL soils that may be disturbed during the course of maintenance, construction, remediation, or investigation activities. This soil management includes soil disturbance, storage, reuse, and disposal.
- MCP-3480, “Environmental Instructions for Facilities, Processes, Materials and Equipment”: This procedure provides instructions for performing environmental planning compliance and protection activities during the course of conducting work.
- Standard-101, “Integrated Work Control Process”: The Integrated Work Control Process (IWCP) is the method by which the Integrated Safety Management System (ISMS), Enhanced Work Planning, and Voluntary Protection Program are implemented for maintenance and construction work activities. The IWCP provides a single process by which all maintenance and construction work on the INEEL is performed. The IWCP establishes the process by which work is screened consistently to uniform criteria to ensure that hazards are appropriately identified, analyzed, and controlled. The standard provides the instructions and process controls for the IWCP at the INEEL.



Table 1. Current status of WAG 6 and 10 IC sites.

Site Code	Description	ROD Requirements	Current Status of IC Site
ORD-03	NPG	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>Land use controls will not be required after remediation if detection limits allow for complete removal of UXO from the site.</p>	<p>The NPG contains numerous individual ordnance sites. Except for the northernmost portion of the site, access requires entrance through the main INEEL road, which is controlled by Site Security. The NPG boundaries are not posted with signs or fences. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
ORD-01	Arco High Altitude Bombing Range	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>Land use controls will not be required after remediation if detection limits allow for complete removal of UXO from the site.</p>	<p>The Arco High Altitude Bombing Range is not currently posted with signs or fences. It is located in the southwest portion of the INEEL (partially off the INEEL) and intersected by U.S. Highway 20/26. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
ORD-09	Twin Buttes Bombing Range	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>Land use controls will not be required after remediation if detection limits allow for complete removal of UXO from the site.</p>	<p>The Twin Buttes Bombing Range is posted with “Environmentally Controlled Area” signs. It is located in the southeast portion of the INEEL (partially off the INEEL) and intersected by U.S. Highway 20. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
ORD-24	Land Mine Fuze Burn Area	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>Interim controls will be maintained to protect workers until the selected remedies have been implemented.</p>	<p>The Land Mine Fuze Burn Area is posted with “Environmentally Controlled Area” signs. It is primarily an open field that can be accessed by entrance through the main INEEL road, which is controlled by Site Security. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>

Table 1. (continued).

Site Code	Description	ROD Requirements	Current Status of IC Site
ORD-08	National Oceanic Atmospheric Administration	Visible access restrictions. Control activities (drilling or excavating). Interim controls will be maintained to protect workers until the selected remedies have been implemented.	The National Oceanic and Atmospheric Administration site is posted with “Environmentally Controlled Access” signs. Access to the site requires entrance through the main INEEL road, which is controlled by Site Security. Before drilling or excavating at the INEEL, an environmental checklist must be completed.
STF-02	STF Gun Range	Visible access restrictions. Control activities (drilling or excavating). Interim controls will be maintained to protect workers until the selected remedies have been implemented.	The STF Gun Range has a single wire fence and is posted with a “Live Munitions” sign. The “Live Munitions” sign contains a telephone number for contact prior to disturbing the area. Access to the site requires entrance through the main INEEL road, which is controlled by Site Security. The road to the STF site has been blocked with a concrete barrier. Before drilling or excavating at the INEEL, an environmental checklist must be completed.
BORAX-01	BORAX-II through -V Leach Pond	Visible access restrictions. Control activities (drilling or excavating). After DOE operations cease, in addition to the above, property lease requirements, including control of land use. Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.	The BORAX-II through V Leach Pond site is marked with an “Environmentally Controlled Access” sign, a radiation sign, and a concrete monument. The “Environmentally Controlled Access” sign contains a telephone number for contact prior to disturbing the area. The road to the BORAX site has been blocked with a concrete barrier. Before drilling or excavating at the INEEL, an environmental checklist must be completed.

Table 1. (continued).

Site Code	Description	ROD Requirements	Current Status of IC Site
BORAX-02	BORAX-I Burial Site	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>After DOE operations cease, in addition to the above, property lease requirements, including control of land use.</p> <p>Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.</p>	<p>The BORAX-I burial site has a chain-link fence and is posted with "Environmentally Controlled Area" signs. The signs contain a telephone number for contact prior to disturbing the area. A locked gate provides access to the site. Concrete monuments are located at the northeast and southwest corners and are marked with radiation, keep out, and poison symbols. The road to the BORAX site has been blocked with a concrete barrier. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
BORAX-08	BORAX Ditch	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>After DOE operations cease, in addition to the above, property lease requirements, including control of land use.</p> <p>Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.</p>	<p>The BORAX Ditch site is marked with an "Environmentally Controlled Access" sign. The sign contains a telephone number for contact prior to disturbing the area. The road to the BORAX site has been blocked with a concrete barrier. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
BORAX-09	BORAX-II through -V	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>After DOE operations cease, in addition to the above, property lease requirements, including control of land use.</p> <p>Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.</p>	<p>The BORAX-II through -V Burial Site has a chain-link and barbwire fence and is posted with "Environmentally Controlled Area" signs. A locked gate provides access to the site. The signs contain a telephone number for contact prior to disturbing the area. The road to the BORAX site has been blocked with a concrete barrier. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
EBR-08	EBR-I (WMO-703) Fuel Oil Tank	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>After DOE operations cease, in addition to the above, property lease requirements, including control of land use.</p> <p>Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.</p>	<p>The EBR-I (WMO-703) Fuel Oil Tank site is posted with an "Environmentally Controlled Access" sign. The sign contains a telephone number for contact prior to disturbing the area. The site is located within the EBR-I facility fence line, and access to the site is through the locked gate. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>

Table 1. (continued).

Site Code	Description	ROD Requirements	Current Status of IC Site
ORME-01	OMRE-01 Leach Pond	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>After DOE operations cease, property lease requirements, including control of land use.</p> <p>Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.</p>	<p>The OMRE-01 Leach Pond site is posted with an “Environmentally Controlled Area” sign. The sign contains a telephone number for contact prior to disturbing the area. Access to the site requires entrance through the main INEEL road, which is controlled by Site Security Before drilling or excavating at the INEEL, an environmental checklist must be completed..</p>
ORD-21	Juniper Mine	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavating).</p> <p>After DOE operations cease, visible restrictions, property lease requirements, including control of land use.</p> <p>Post-DOE control property transfer requirements, including issuance of a finding of suitability to transfer and control land use.</p>	<p>The Juniper Mine site is posted with an “Environmentally Controlled Area” sign. The sign contains a telephone number for contact prior to disturbing the area. The site is located off U.S. Highway 22 not controlled by Site Security. Before drilling or excavating at the INEEL, an environmental checklist must be completed.</p>
ORD-06	Naval Ordinance Disposal Area (NODA)	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavation).</p> <p>Interim controls will be maintained to protect workers until the selected remedies have been implemented.</p>	<p>NODA is posted with “Environmentally Controlled Access” signs. The site is primarily an open field that can be accessed by entrance through the main INEEL road, which is controlled by Site Security. Before drilling or excavation at the INEEL, an environmental checklist must be completed.</p>
ORD-10	Fire Station II Zone and Range Fire Burn Area	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavation).</p> <p>Interim controls will be maintained to protect workers until the selected remedies have been implemented.</p>	<p>The Fire Station II Zone and Range Fire Burn Area is posted with “Environmentally Controlled Access” signs. The site is primarily an open field that can be accessed by entrance through the main INEEL road, which is controlled by Site Security. Before drilling or excavation at the INEEL, an environmental checklist must be completed.</p>

Table 1. (continued).

Site Code	Description	ROD Requirements	Current Status of IC Site
ORD-15	Experimental Field Station	<p>Visible access restrictions.</p> <p>Control activities (drilling or excavation).</p> <p>Interim controls will be maintained to protect workers until the selected remedies have been implemented.</p>	<p>The Experimental Field Station is posted with “Environmentally Controlled Access” signs. The site is primarily an open field that can be accessed by entrance through the main INEEL road, which is controlled by Site Security. Before drilling or excavation at the INEEL, an environmental checklist must be completed.</p>

## 6. INEEL COMPREHENSIVE FACILITY AND LAND USE PLAN

The *INEEL Comprehensive Facility and Land Use Plan* (CFLUP) (DOE-ID 1997) identifies and provides guidance on current and anticipated future INEEL land and facility use.

Access to the INEEL is currently restricted for purposes of security and public safety. Sitewide access restrictions would limit accessibility until at least 2095 based on the CFLUP. The CFLUP is used as a standard reference for determining restrictions when planning construction and maintenance activities at the INEEL. Keeping the CFLUP database current is an important part of protecting workers, the environment, and the public.

The INEEL-wide comprehensive approach will incorporate by reference the CFLUP, installation maps, a comprehensive permitting system, and other installation policies and orders.

The current land use for the INEEL consists of wildlife management, government uses, industrial operations, and waste management. Aside from the operational facilities, the remainder of the land within the INEEL boundaries is largely undeveloped and used as a buffer area on which environmental research, ecological preservation, and sociocultural preservation takes place. The U.S. Bureau of Land Management classifies the INEEL land as industrial or mixed-use preservation. The future land use within the INEEL is projected to remain essentially the same.

## 7. REFERENCES

42 USC 9601 et seq., 1980, *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/Superfund)*, December 1980.

DOE-ID, 1991, *Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory*, U.S. Department of Energy, Idaho Operations Office; U.S. Environmental Protection Agency, Region 10; Idaho Department of Health and Welfare, December 1991.

DOE-ID, 1997, *Idaho National Engineering Laboratory Comprehensive Facility and Land Use Plan*, DOE/ID-10514, December 1997.

DOE-ID, 2002, *Record of Decision for Experimental Breeder Reactor-I/Boiling Water Reactor Experiment Area and Miscellaneous Sites*, DOE/ID-10980, November 2002.

INEEL, 1996, *Record of Decision for Stationary Low-Power Reactor-I and Boiling Water Reactor Experiment-I Burial Grounds (Operable Units 5-05 and 6-01), and 10 No Action Sites (OU 5-01, 5-03, 5-04, and 5-11)*, Department of Energy, Idaho Department of Quality, INEL-95/0282, January 1996.

MCP-3002, "Managing Disturbed Soils," Rev. 6, November 5, 2001.

MCP-3480, "Environmental Instructions for Facilities, Processes, Materials and Equipment," Rev. 7, September 3, 2002.

Standard-101, "Integrated Work Control Process," Rev. 13, October 21, 2002.